

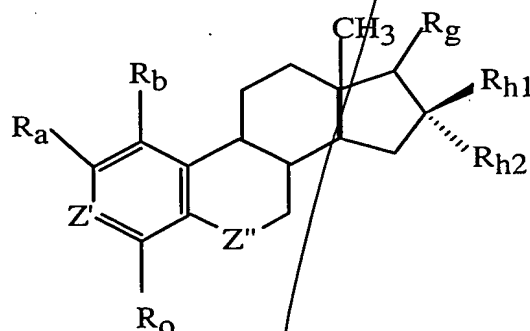
CLAIMS

We claim:

5

1.

A compound of the general formula:



wherein:

a) R_b and R_o are independently -H, -Cl, -Br, -I, -F, -CN, lower alkyl, -OH, -CH₂-OH, -NH₂; or N(R_6)(R_7), wherein R_6 and R_7 are independently hydrogen or an alkyl or branched alkyl with up to 6 carbons;

b) R_a is -N₃, -C≡N, -C≡C-R, -C=CH-R, -R-C=CH₂, -C≡CH, -O-R, -R-R₁, or -O-R-R₁ where R is a straight or branched alkyl with up to 10 carbons or aralkyl, and R_1 is -OH, -NH₂, -Cl, -Br, -I, -F or CF₃;

c) Z' is >CH, >COH, or >C-R₂-OH, where R_2 is an alkyl or branched alkyl with up to 10 carbons or aralkyl;

d) >C- R_g is >CH₂, >C(H)-OH, >C=O, >C=N-OH, >C(R_3)OH, >C=N-OR₃, >C(H)-NH₂, >C(H)-NHR₃, >C(H)-NR₃R₄, or >C(H)-C(O)-R₃, where each R_3 and R_4 is independently an alkyl or branched alkyl with up to 10 carbons or aralkyl;

e) R_{h1} and R_{h2} are independently H, or a straight or branched chain alkyl, alkenyl or alkynyl with up to 6 carbons that is

unsubstituted, or substituted with one or more groups selected from a hetero functionality (O-Y, N-Y or S-Y) where Y is H, Me or an alkyl chain up to 6 carbons; a halo functionality (F, Cl, Br or I); an aromatic group optionally substituted with hetero, halo or alkyl; or R_{h1} and R_{h2} are independently an aromatic group optionally substituted with hetero, halo or alkyl, provided that both R_{h1} and R_{h2} are not H;

f) Z'' is $>CH_2$, $>C=O$, $>C(H)-OH$, $>C=N-OH$, $>C=N-OR_5$, $>C(H)-C \equiv N$, or $>C(H)-NR_5R_5$, wherein each R_5 is independently hydrogen, an alkyl or branched alkyl with up to 10 carbons or aralkyl;

and wherein all monosubstituted substituents have either an α or β configuration.

2. The compound of Claim 1, wherein :
 R_b and R_o are H,
 R_a is OCH_3
 Z' is $>C-OH$,
 $>C-R_g$ is $>C(H)-\beta-OH$, and
 Z'' is $>CH_2$.
3. The compound of Claim 2, wherein :
 R_{h1} and R_{h2} are independently H and Et.
4. The compound of Claim 2, wherein:
 R_{h1} and R_{h2} are independently H and n-Pr.
5. The compound of Claim 2, wherein:
 R_{h1} and R_{h2} are independently H and i-Bu.
6. The compound of Claim 2, wherein:

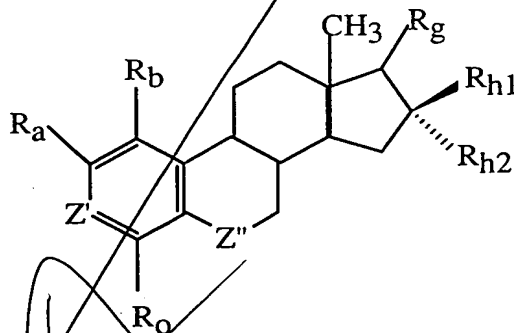
R_{h1} and R_{h2} are independently H and CH_2OH .

7. The compound of Claim 2, wherein :
 R_{h1} and R_{h2} are independently H and n-Bu.

8. The compound of Claim 2, wherein :
 R_{h1} and R_{h2} are independently H and Me.

9. The compound of Claim 2, wherein :
 R_{h1} and R_{h2} are independently H and $(CH_2)_n-C(Me)_2$.

10. A method of inhibiting angiogenesis comprising administering to an endothelial cell an angiogenesis inhibiting amount of a compound of the general formula:



wherein:

a) R_b and R_o are independently -H, -Cl, -Br, -I, -F, -CN, lower alkyl, -OH, - CH_2OH , - NH_2 ; or $N(R_6)(R_7)$, wherein R_6 and R_7 are independently hydrogen or an alkyl or branched alkyl with up to 6 carbons;

b) R_a is - N_3 , - $C \equiv N$, - $C \equiv C-R$, - $C=CH-R$, - $R-C=CH_2$, - $C \equiv CH$, -O-R, -R- R_1 , or -O-R- R_1 where R is a straight or branched alkyl with up to 10 carbons or aralkyl, and R_1 is -OH, - NH_2 , -Cl, -Br, -I, -F or CF_3 ;

c) Z' is $>\text{CH}$, $>\text{COH}$, or $>\text{C-R}_2\text{-OH}$, where R_2 is an alkyl or branched alkyl with up to 10 carbons or aralkyl;

5 d) $>\text{C-R}_g$ is $>\text{CH}_2$, $>\text{C(H)-OH}$, $>\text{C=O}$, $>\text{C=N-OH}$, $>\text{C(R}_3\text{)OH}$, $>\text{C=N-OR}_3$, $>\text{C(H)-NH}_2$, $>\text{C(H)-NHR}_3$, $>\text{C(H)-NR}_3\text{R}_4$, or $>\text{C(H)-C(O)-R}_3$, where each R_3 and R_4 is independently an alkyl or branched alkyl with up to 10 carbons or aralkyl;

10 e) R_{h1} and R_{h2} are independently H, or a straight or branched chain alkyl, alkenyl or alkynyl with up to 6 carbons that is unsubstituted, or substituted with one or more groups selected from a hetero functionality (O-Y, N-Y or S-Y) where Y is H, Me or an alkyl chain up to 6 carbons; a halo functionality (F, Cl, Br or I); an aromatic group optionally substituted with hetero, halo or alkyl; or R_{h1} and R_{h2} are independently an aromatic group optionally substituted with hetero, halo or alkyl, provided that both R_{h1} and R_{h2} are not H;

15 20 f) Z'' is $>\text{CH}_2$, $>\text{C=O}$, $>\text{C(H)-OH}$, $>\text{C=N-OH}$, $>\text{C=N-OR}_5$, $>\text{C(H)-C}\equiv\text{N}$, or $>\text{C(H)-NR}_5\text{R}_5$, wherein each R_5 is independently hydrogen, an alkyl or branched alkyl with up to 10 carbons or aralkyl;

25 and wherein all monosubstituted substituents have either an α or β configuration.

ADD
A-1